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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,942	05/28/2002	King-Tung Huang	ACIP0015USA	9495

27765 7590 05/02/2003

NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

CHANG, YEAN HSI

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/063,942

Applicant(s)

HUANG, KING-TUNG

Examiner

Yean-Hsi Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. (US 6,186,800 B1).

Klein teaches a structure for mounting a circuit board (2, fig. 1) to a housing (3, fig. 1) of data processing device (1, fig. 1), comprising:

- A mounting post (10a, fig. 4) secured to the circuit board (see col. 5, lines 44-51) and having a groove (18, fig. 4) formed on outer surface thereof (claim 1)
- A retaining unit (9a, fig. 4) having a slot (11a, fig. 4) with an open end (13, fig. 4) for receiving the mounting post through the groove along a direction parallel to a surface of the housing (shown in fig. 1; also see col. 5, lines 15-24) (claim 1)
- Wherein the housing, the retaining unit and the mounting post are made of metal (see col. 4, lines 49-54, and col. 5, lines 21-24; well known material for electrical connection is metal) (claim 3)

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- Wherein the circuit board has a through hole (21, fig. 4) for receiving one end (19a, fig. 4) of the mounting post and the mounting post is secured to the circuit board at the through hole (see col. 5, lines 38-62) (claims 6 and 8)

Klein fails to teach the retaining unit being provided on a surface of the housing and stamped out from the housing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Klein with a retaining unit stamped out from the housing, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art; and the method of forming the device is not convincing as to the issue of patentability of the device itself, since the structure of the device is not changed. See MPEP §2144.04 VI A, and MPEP §2113.

3. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. in view of Scholder et al. (US 5,490,038).

Klein discloses the claimed invention except a stopper provided on the housing. However, Scholder teaches a stopper (66, fig. 3) provided on a housing (16, fig. 3) of a data processing device (see col. 3, lines 2-6) for stopping a circuit board (12, fig. 3) from moving out of the housing along a direction parallel to a surface (surface of 14, fig. 3) of the housing when the circuit board is installed, comprising a movable rod (68, fig. 3) being movable from a first position (shown in fig. 3) to stop the circuit board and a second position (not shown) to release the circuit board by a spring (not shown, see col. 3, lines 60-62). It would have been obvious to one having ordinary skill in the art at the

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time the invention was made to modify the device of Klein with the stopper taught by Scholder so that the circuit board may be firmly and stably installed in position.

4. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. in view of Scholder et al.

Klein discloses the claimed invention as discussed in paragraph 2, hereinabove, except a stopper provided on the housing of the data processing device. However, Scholder teaches a stopper (66, fig. 3) provided on a housing (16, fig. 3) of a data processing device (see col. 3, lines 2-6) for stopping a circuit board (12, fig. 3) from moving out of the housing along a direction parallel to a surface (surface of 14, fig. 3) of the housing when the circuit board is installed, comprising a movable rod (68, fig. 3) being movable from a first position (shown in fig. 3) to stop the circuit board and a second position (not shown) to release the circuit board by a spring (not shown, see col. 3, lines 60-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Klein with the stopper taught by Scholder so that the circuit board may be firmly and stably installed in position.

5. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. in view of Scholder et al.

Klein teaches a data processing device (1, fig. 1) comprising:

- A circuit board (2, fig. 1) (claims 14 and 17)

- A mounting post (10a, fig. 4) being secured to the circuit board (see col. 5, lines 44-51) and having a groove (18, fig. 4) formed on outer surface thereof (claims 14 and 17)
- A housing (3, fig. 1) having a surface provided with a retaining unit (9a, fig. 4) having a slot (11a, fig. 4) with an open end (13, fig. 4) for receiving the mounting post through the groove along a direction parallel to a surface of the housing (shown in fig. 1; also see col. 5, lines 15-24) (claims 14 and 17)
- Wherein the housing, the retaining unit and the mounting post are made of metal (see col. 4, lines 49-54, and col. 5, lines 21-24; well known material for electrical connection is metal) (claim 19)
- Wherein the circuit board has a through hole (21, fig. 4) for communicating with a threaded hole (22, fig. 4) of one end (19a, fig. 4) of the mounting post and the mounting post is secured to the circuit board at the through hole (see col. 5, lines 38-62) (claims 15-16)

Klein fails to teach a plurality of retaining units being provided on a surface of the housing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Klein with a plurality of retaining units provided on the surface of the housing, since it has been held that a mere reversal and duplication of the essential working parts of a device involves only routine skill in the art (claims 14 and 17). See MPEP §2144.04 VI A & B.

Klein discloses the claimed invention except a stopper provided on the housing. However, Scholder teaches a stopper (66, fig. 3) provided on a housing (16, fig. 3) of a

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data processing device (see col. 3, lines 2-6) for stopping a circuit board (12, fig. 3) from moving out of the housing along a direction parallel to a surface (surface of 14, fig. 3) of the housing when the circuit board is installed, comprising a movable rod (68, fig. 3) being movable from a first position (shown in fig. 3) to stop the circuit board and a second position (not shown) to release the circuit board by a spring (not shown, see col. 3, lines 60-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Klein with the stopper taught by Scholder so that the circuit board may be firmly and stably installed in position (claims 14 and 18).

Correspondence

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (703) 306-5798. The examiner can normally be reached on 07:30-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (703) 308-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431 for regular communications and for After Final communications. There are RightFAX numbers and provide the fax sender with an auto-reply fax verifying receipt by the USPTO: Before-Final (703-872-9318) and After-Final (703-872-9319).

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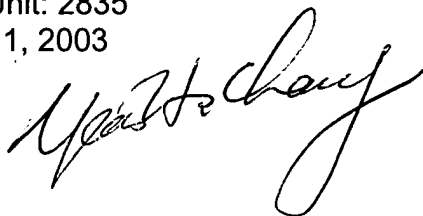
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-8558.

Yean-Hsi Chang

Patent Examiner

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May 1, 2003

A handwritten signature in black ink, appearing to read 'Yean-Hsi Chang', written in a cursive style.